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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,006	10/10/2001	David P. Aschenbeck	25019A	8542

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EXAMINER
WATKINS III, WILLIAM P

ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/975,006	ASCHENBECK ET AL.	
	Examiner	Art Unit	
	William P. Watkins III	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,11-54,56,57 and 60* is/are pending in the application.

4a) Of the above claim(s) *1-7, 11-52, 54, 56 and 57* is/are withdrawn from consideration.

5)☒ Claim(s) *8 and 9* is/are allowed.

6)☒ Claim(s) *53 and 60* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 8 and 9 remain allowed due to the withdrawal of previous rejections for the reasons noted in sections 1 and 2 of the detailed portion of the office action mailed 30 November 2005, section 2 of the detailed portion of the office action mailed 24 June 2005, and sections 2 and 3 of the detailed portion of the office action mailed 16 March 2004.

2. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (U.S. 4,405,680) in view of George et al. (U.S. 5,516,573) further in view of Miller et al. (WO 00/40794).

Hansen teaches a glass fiber mat, which is saturated with an unblown asphalt composition that may have 0 to 80% fillers (col. 3, lines 10-15, col. 1, lines 60-69). The saturated mat is coated on the top and bottom layers with a blown asphalt with may have 1 to 80% filler (col. 4, lines 1-5, col. 3, lines 45-55). Top layer granules, as known in the shingle art, may be used (col. 4, lines 5-10, abstract). The total layers of Hansen may be at least 1/8 inch in thickness (col. 4, line 50). George et al. teaches the use of an adhesive that forms the top part of

the top asphalt coating layer of a reinforced shingle. The adhesive layer increases the ability of the outer layer granules to adhere to the top coating layer under various wet and dry tests (abstract, col. 9, line 35 through col. 12, lines 15). Miller et al. teaches the use of asphalt based adhesives as well as other thermoset and thermoplastic adhesives to form protective and adhesive layers on top of asphalt coat layers to better join granules to the asphalt coat layers (page 10, lines 15-20 and 25-35).

The instant invention claims an asphalt layer on top of a saturated glass fiber layer whose under side is coated with an asphalt layer, the top layer has increased ability to retain roofing granules compared to the bottom layer (part (F) of claim 53). It would have been obvious to one of ordinary skill in the art to have used an adhesive on the top asphalt layer of Hansen in order to increase the ability of the top layer to retain granules because of the teachings of George et al. It further would have been obvious to one of ordinary skill in the art to have used an asphalt based adhesive as the adhesive in the outer layer of Hansen in view of George et al. because of the teachings of Miller et al. that asphalt based adhesives are also effective to increase binding of granules on roofing. As the

PTO does not have experimental facilities, the examiner assumes that the increased granule retention of the top layer of Hansen in view of George et al. as modified by Miller et al. meets the granule loss limitation of the ASTM Method D4977 test of instant claim 53, absent evidence to the contrary.

3. Claims 53 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen (U.S. 4,405,680) in view of George et al. (U.S. 5,516,573) further in view of Chaverot et al. (U.S. 5,120,777).

Hansen teaches a glass fiber mat, which is saturated with an unblown asphalt composition that may have 0 to 80% fillers (col. 3, lines 10-15, col. 1, lines 60-69). The saturated mat is coated on the top and bottom layers with a blown asphalt with may have 1 to 80% filler (col. 4, lines 1-5, col. 3, lines 45-55). Top layer granules, as known in the shingle art, may be used (col. 4, lines 5-10, abstract). The total layers of Hansen may be at least 1/8 inch in thickness (col. 4, line 50). George et al. teaches the use of an adhesive that forms the top part of the top asphalt coating layer of a reinforced shingle. The adhesive layer increases the ability of the outer layer granules to adhere to the top coating layer under various wet and dry

tests (abstract, col. 9, line 35 through col. 12, lines 15). Chaverot et al. teaches an asphalt mixture that has increased adhesiveness with granules under conditions that have high levels of moisture (abstract, col. 9, line 35 through col. 10, lines 30).

The instant invention claims an asphalt layer on top of a saturated glass fiber layer whose under side is coated with an asphalt layer, the top layer has increased ability to retain roofing granules compared to the bottom layer (part (F) of claim 53). It would have been obvious to one of ordinary skill in the art to have used an adhesive on the top asphalt layer of Hansen in order to increase the ability of the top layer to retain granules because of the teachings of George et al. It further would have been obvious to have increased the adhesion of the asphalt and granules by using an asphalt that has increased adhesive ability in the entire upper layer asphalt portion in order to avoid use of a separate outer adhesive layer because of the teachings of Chaverot et al. As the PTO does not have experimental facilities, the examiner assumes that the increased granule retention of the top layer of Hansen in view of George et al. as modified by Chaverot et al. meets the granule loss

limitation of the ASTM Method D4977 test of instant claim 53, absent evidence to the contrary.

4. Applicant's arguments filed 25 July 2006 have been fully considered but they are not persuasive.

Applicant states at the bottom of page 17 of the paper filed 25 July 2006 that the examiner relies on either Miller et al. or Chaverot et al. to teach an entire upper asphalt layer having increased adhesion. This is incorrect. The examiner relies only on the rejection using Chaverot et al. for the teaching of an entire layer. The rejection using Miller et al. is directed to an asphalt adhesive layer on the outer surface of the top layer asphalt portion. This rejection has been maintained against claim 53, as the new language of the upper asphalt based coating layer having increased adhesion, does not preclude an outer surface layer coating on the bulk coating of the upper layer that is an asphalt based adhesive different in composition from the bulk of the asphalt based upper layer. The rejection using Miller et al. has not been applied to new claim 60 that requires the entire upper layer to have increased adhesion.

Applicant again argues that there is no motivation to increase the adhesion of granules in Hansen. As noted before by the examiner, there is clear motivation given by George et al. to enhance adhesion to prevent granule removal and enhance resistance to photo-degradation of the asphalt coating (col. 2, lines 30-35). As Hansen also has an asphalt coating with granules, one of ordinary skill in the art would also clearly have motivation to transfer the teaching of George et al. to increase adhesion in order to prevent granule removal in Hansen. Applicant also argues that application of the polymer and bitumen mixture of Chaverot et al. to the asphalt of Hansen would substantially increase the cost of Hansen and outweigh the benefit of any increased granule retention because of the added cost of the polymers used in Chaverot et al. This is not found persuasive because the impregnating asphalt of Hansen already contains similar block copolymers to those required by Chaverot et al. (col. 3, liens 40-45 of Hansen; col. 3, lines 25-45 of Chaverot et al.).

Applicant's final argument is that neither Miller et al. nor Chaverot et al. teach the use of any fillers and would therefore not meet the limitation of Claim 53 that the asphalt layer contain substantial filler. As noted above, Miller et al.

is not relied upon for an entire upper layer and therefore does not have to have filler as the bulk of the asphalt of the layer as taught by Hansen, meets the filler limitation of claim 53. Regarding the rejection using Chaverot et al., the examiner notes that the polymer/bitumen blend of Chaverot et al. is taught as useful to form asphalt mixes (abstract) and may contain a blown bitumen (col. 3, lines 1-15). The outer coating of Hansen is a asphalt composition formed of blown bitumen and filler. One of ordinary skill in the art would not seek to use the blown bitumen/polymer mixture of Chaverot et al. alone as a roofing asphalt, but would seek to substitute the bitumen/polymer for the blown bitumen of Hansen in the bitumen and filler composition that forms the asphalt of Hansen. This substitution is fully compatible with the teachings of Chaverot et al. to form "asphalt mixes".

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Watkins III whose telephone number is 571-272-1503. The examiner works an increased flex time schedule, but can normally be reached Monday through Friday, 11:30 A.M. through 8:00 P.M. Eastern Time. The examiner returns all calls within one business day unless an extended absence is noted on his voice mail greeting.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William C. Watkins

WW/ww
September 25, 2006

WILLIAM P. WATKINS III
PRIMARY EXAMINER